Serial No.: 08/087,132

-2-

Group Art Unit: 1812

In the Claims

Please cancel claims 1, 26-31, 33, 36, 37, 39, 40, 44-46, and 50-138.

Please add the following new claims:

- sequence modification, said molecule encoding for a polypeptide having an amino acid sequence sufficiently duplicative of that of human cystic fibrosis transmembrane conductance regulator to allow possession of the biological property of epithelial cell anion channel regulation, wherein the presence of said sequence modification within the encoding sequence of said DNA molecule facilitates maintenance of said molecule in a host bacterial cell.
 - 140. A DNA molecule according to Claum 139 wherein said sequence modification is an inserted intron.
 - 141. A DNA molecule according to Claim 140 wherein said intron is a synthetic intron.
 - 142. A DNA molecule according to Claim 139 wherein said sequence modification is a point mutation.
 - 143. A DNA molecule according to Claim 139 wherein said sequence of the modification is a silent mutation that does not alter the amino acid sequence of the polypeptide produced therefrom.

Serial No.: 08/087,132

-3-

Group Art Unit: 1812

molecule that contains: (1) a nucleotide sequence encoding for human cystic fibrosis transmembrane conductance regulator polypeptide, or for a polypeptide having an amino acid sequence sufficiently duplicative of that of human cystic fibrosis transmembrane conductance regulator to allow possession of the biological property of epithelial cell anion channel regulation; and (2) a nucleotide sequence within said encoding sequence that defines a cryptic bacterial promoter, itself capable of facilitating synthesis of partial cystic fibrosis transmembrane conductance regulator polypeptides that are toxic when expressed in bacterial cells, wherein the encoding-nucleotide sequence of said DNA molecule is modified relative to said parent molecule, thereby limiting the amount of partial cystic fibrosis transmembrane conductance regulator polypeptide that is produced under the direction of said promoter when said molecule is placed in a bacterial cell.

145. A DNA molecule according to Claim 144 wherein said nucleotide sequence modification is a silent mutation that does not after the amino acid sequence of the polypeptide produced therefrom.

146. A purified DNA molecule according to Claim 139.

- 147. A DNA molecule according to Claim 139 that further comprises a recoverable clone.
 - 148. A DNA molecule according to Claim 139 that is a cDNA.
 - 149. A DNA molecule according to Claim 139 that is single stranded.

34 / A

E'

Serial No.: 08/087,132

-4-

Group Art Unit: 1812

150. A RNA molecule that is complementary to a DNA molecule according to Claim 139.

151. A DNA molecule consisting essentially of: (1) a DNA sequence encoding for a polypeptide having an amino acid sequence sufficiently duplicative of that of cystic fibrosis transmembrane conductance regulator to allow possession of the biological property of epithelial cell anion channel regulation and: (2) one or more regulatory elements operatively linked thereto, wherein said DNA molecule can be maintained stably in a culture of host bacterial cells, and wherein said molecule can be recovered therefrom in purified form.

- 152. A host cell containing a DNA molecule according to Claim 139.
- 153. A host cell according to Claim 152 wherein said host cell is a bacterial cell.
- 154. A composition consisting essentially of a culture of host bacterial cells that contain DNA molecules according to Claim 139.
- sequence itself having a sequence modification, said molecules encoding for a polypeptide having an amino acid sequence sufficiently duplicative of that of human cystic fibrosis transmembrane conductance regulator to allow possession of the biological property of epithelial cell anion channel regulation, wherein the presence of said sequence modification within the encoding sequence of said DNA molecules facilitates maintenance of said molecules in a culture of host bacterial cells.